



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/758,299	01/10/2001	David Clarke Pollock	HEM 99/607 (A-2911)	9699
24131	7590	04/10/2006	EXAMINER	
LERNER GREENBERG STEMER LLP P O BOX 2480 HOLLYWOOD, FL 33022-2480			PRONE, JASON D	
			ART UNIT	PAPER NUMBER
			3724	

DATE MAILED: 04/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/758,299	POLLOCK ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jason Prone	3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 21 February 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,5,7-11 and 22-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,5,7-11 and 22-24 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

### **DETAILED ACTION**

It is noted that Claim 9 depends from cancelled claim 6. This discrepancy is considered a typo and for this Office action only claim 9 will be considered as if it was dependant off of claim 1.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5, 7, 8, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fr. 470,543 in view of Spengler (4,014,234).

#### **Claims 1, 5, 7, and 8:**

Fr. 470,543 discloses the invention including a pair of cylinders disposed opposite one another with a gap in-between (C and D), that the pair of cylinders includes a first cutting cylinder (C) having a periphery with a cutting knife disposed helically about the periphery (E), and a second cylinder (D), and one drive (it is inherent the cylinders C and D must have a drive to rotate them, see semi-circular arrows from Fig. 1) rotating the first cutting cylinder at a speed proportional to the speed of the work piece (speed of the cylinder is proportional to the speed of the work piece to produce the specific cut shown in Fig. 3) for cutting and providing a cut from the work piece with a smooth straight edge (a).

Art Unit: 3724

However, Fr. 470,543 fails to disclose a sub-frame having a pivot point, the sub-frame supports the cylinders, the sub-frame controlling a position of the cylinders in regards to the work piece, a further drive connected to the sub-frame for pivoting the sub-frame about the pivot point, a control unit connected to and controlling the further drive and the one drive for controlling a rotational speed of the first cutting cylinder, for a given press speed, the control unit causing the cylinders to be rotated faster and decreasing the angle of the cylinders relative to the ribbon, a second drive rotates and mounts to the second cylinder, the first and second drives are motors, and that the first and second drives are gears.

In regards to claims 1, 5, 7, and 8, Spengler teaches a sub-frame (32) having a pivot point (29), the sub-frame supports the cylinders and first and second drives (Fig. 3), the sub-frame controlling a position of the cylinders in regards to the work piece (29), a further drive connected to the sub-frame for pivoting the sub-frame about the pivot point (45), a control unit connected to and controlling the further drive and the one drive for controlling a rotational speed of the first cutting cylinder (Column 5 lines 40-52), for a given press speed, the control unit capable of causing the cylinders to be rotated faster and decreasing the angle of the cylinders relative to the ribbon (Column 5 lines 40-52 and 45), a second drive rotates and mounts to the second cylinder (Abstract), the first and second drives are motors (6), and the first and second drives are gears (7). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to have provided Fr. 470,543 with a pivoting sub-frame and drives, as

taught by Spengler, to allow for different angles to be cut into the work piece and to more efficiently run the cutting drums.

Claims 10 and 11:

Fr. 470,543 discloses the invention including a frame (Inherent), one drive (it is inherent the cylinders C and D must have a drive to rotate them, see semi-circular arrows from Fig. 1), a pair of cylinders disposed opposite one another with a gap in-between (C and D), the pair of cylinders includes a first cutting cylinder (C) having a periphery with a cutting knife disposed helically about the periphery (E), and a second cylinder (D), and the first cutting cylinder is driven by the one drive at a speed proportional to the speed of the work piece (speed of the cylinder is proportional to the speed of the work piece to produce the specific cut shown in Fig. 3) for cutting and providing a cut from the work piece with a smooth straight edge (a).

However, Fr. 470,543 fails to disclose the one drive is housed in the sub-frame, a sub-frame pivotally mounted on the frame, the sub-frame controlling a position of the cylinder in regards to the work piece, a further drive connected to the sub-frame for pivoting the sub-frame about the pivot point, a control unit connected to and controlling the further drive and the one drive for controlling a rotational speed of the first cutting cylinder, for a given press speed, the control unit causing the cylinders to be rotated faster and decreasing the angle of the cylinders relative to the ribbon, a second drive rotates and mounts to the second cylinder, a component of travel of a point of contact between the cylinders in a direction of travel of the work piece matches a speed of the work piece for cutting in a straight line, a sensor connected to the control unit and

Art Unit: 3724

disposed in the travel path of the work piece, and providing control signals to the control unit for controlling operation of the cylinders and monitoring the cutting operation.

Spengler teaches the one drive is housed in the sub-frame (Fig. 1), a sub-frame pivotally mounted on the frame (29), the sub-frame controlling a position of the cylinder in regards to the work piece (32), a further drive connected to the sub-frame for pivoting the sub-frame about the pivot point (45), a control unit connected to and controlling the further drive and the one drive for controlling a rotational speed of the first cutting cylinder (Column 5 lines 40-52), for a given press speed, the control unit capable of causing the cylinders to be rotated faster and decreasing the angle of the cylinders relative to the ribbon (Column 5 lines 40-52 and 45), a second drive rotates and mounts to the second cylinder (Abstract), and that a component of travel of a point of contact between the cylinders in a direction of travel of the work piece matches a speed of the work piece for cutting in a straight line (Fig. 3). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to have provided Fr. 470,543 with a pivoting sub-frame and drives, as taught by Spengler, to allow for different angles to be cut into the work piece and to more efficiently run the cutting drums.

2. Claims 9 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fr. 470,543 in view of Spengler as applied to claim 1 above, and further in view of Shore et al. (5,526,726). Fr. 470,543 and Spengler disclose the invention but fail to disclose a sensor, providing control signals to the control unit for controlling operation of

Art Unit: 3724

the cylinders and monitoring the cutting operation, the sensors detect an unacceptable cut, the sensor is a position sensor, and the control unit is a microprocessor.

Shore et al. teaches a sensor, providing control signals to the control unit for controlling operation of the cylinders and monitoring the cutting operation, the sensors detect an unacceptable cut, the sensor is a position sensor, and the control unit is a microprocessor (Column 1 lines 15-26). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to have replaced the user input control unit of Fr. 470,543 in view of Spengler with the sensors and control unit as taught by Shore et al. in order to provide Fr. 470,543 in view of Spengler with a more accurate and faster control of the cutting conditions.

#### ***Response to Arguments***

3. Applicant's arguments filed 21 February 2006 have been fully considered but they are not persuasive. Spengler, is perfectly capable of increasing the speed of the drums and increasing/decreasing their angle relative to the work piece. For example, the apparatus, taught by Spengler, is capable of increasing the speed of the drums from an off/stopped position to the desired speed while simultaneously changing the angle with item 45. During this increase in speed, the cutting lengths of the work piece would also increase.

#### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Prone whose telephone number is (571) 272-4513. The examiner can normally be reached on 7:30-5:00, Mon - (every other) Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on (571) 272-4514. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

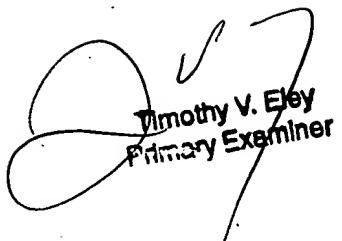
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 09/758,299  
Art Unit: 3724

Page 8

April 04, 2006

JP



Timothy V. Eley  
Primary Examiner